RESTORATION ADVISORY BOARD

Concord, California

Meeting of April 7, 2003

Reporter's Transcript

NICCOLI REPORTING (650) 573-9339

NAVAL WEAPONS STATION

SEAL BEACH, DETACHMENT CONCORD

RESTORATION ADVISORY BOARD

REPORTER'S TRANSCRIPT OF MEETING

April 7, 2003

Willow Pass Community Center
2748 East Olivera Road
Concord, California

Reported by Christine M. Niccoli, RPR, C.S.R. No. 4569

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CERTIFIED SHORTHAND REPORTERS SERVING THE BAY AREA

PARTICIPANTS

COCHAIRS: THERESA L. MORLEY - United States Navy
MARY LOUISE WILLIAMS - Concord resident

RAB MEMBERS:

DAVID L. GRIFFITH - City of Concord representative
ED McGEE - Martinez resident
LAURENT M. MEILLIER - San Francisco Bay Regional Water Quality Control Board (RWQCB)
MARIO M. MENESINI - Walnut Creek resident
RAYMOND O'BRIEN - Bay Point resident
MARCUS O'CONNELL - Concord resident
JIM PINASCO - California Department of Toxic Substances Control (DTSC)
PHILLIP RAMSEY - U.S. Environmental Protection Agency (EPA)
IGOR O. SKAREDOFF - Martinez resident
GAY TANASESCU - Bay Point resident

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OTHER ATTENDEES

AMADO C. ANDAL - Weston Solutions, Inc.
DAVID BAILLIE - United States Navy
CHRISTOPHER BOYER - Martinez resident
BETH J. BYRNE - Concord citizen
HARRY M. BYRNE - Concord citizen
JOANNA CANEPA - Tetra Tech EM Inc.
DAVID C. COOPER - U.S. Environmental Protection Agency (EPA)
CAROLYN HUNTER - Tetra Tech EM Inc.
PATRICK LYNCH - Technical Assistance Grant adviser
TOM PINARD - United States Navy
PATRICIA RYAN - California Department of Toxic Substances Control (DTSC)
PETER M. STRAUSS - PM Strauss & Associates
STEPHEN F. TYAHLA - Department of the Navy
JERRY T. WICKHAM - Tetra Tech EM Inc.

CONCORD, CALIFORNIA, MONDAY, APRIL 7, 2003, 7:05 P.M.

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MS. WILLIAMS: Okay. I'd like to call to order the April 7th, 19- -- 2003, Restoration Advisory Board meeting. And I'd like to welcome all members of the audience, and it's good to see familiar faces around the table.

So we're going to start off with introductions as usual, and we'll start to my far right and go on around. And then after we finish with Ray in the yellow shirt at the table, we'll introduce members of the public.

MR. STRAUSS: Yes. I -- I'm Peter Strauss.

ATTENDEE: How are you?

MR. STRAUSS: I was just engaged as the -- under the technical advisory program for the RAB to provide technical assistance.

MS. MORLEY: I'm Theresa Morley. I'm the Navy cochair.

MS. WILLIAMS: I'm Mary Lou Williams, community cochair.

MR. McGEE: Ed McGee, Martinez resident.

MR. GRIFFITH: David Griffith, City of Concord.

MR. MENESINI: Mario Mene- -- Menesini, Walnut Creek -- I had to look at the sign to make sure -- also

in the Central Sanitary District.
MR. RAMSEY: I'm Phillip Ramsey with the United States Environmental Protection Agency.
MR. SKAREDOFF: Igor Skaredoff, Martinez resident.
MS. TANASESCU: Gay Tanasescu, Bay Point resident.
MR. TYAHLA: Steve Tyahla, the lead RPM for the Navy.
MR. BAILLIE: Dave Baillie, environmental manager for the Naval Weapons Station.
MR. O'CONNELL: Marcus O'Connell, Concord resident.
MR. O'BRIEN: Ray O'Brien, Bay Point resident.
MR. BYRNE: Harry Byrne, Concord.
MS. BYRNE: Beth Byrne, Concord resident.
MR. WICKHAM: Jerry Wickham, Tetra Tech.
THE REPORTER: I'm sorry. Terry?
MR. WICKHAM: Jerry Wickham.
THE REPORTER: Wickham.
MR. ANDAL: Amado Andal, Weston Solutions.
MR. PINARD: Tom Pinard, US Navy, public affairs.
MS. CANEPA: Joanna Canepa with Tetra Tech.
MR. LYNCH: Patrick Lynch. I'm the Technical

Assistance Grant adviser.
MR. COOPER: David Cooper, U.S. Environmental Protection Agency.
MR. BOYER: Chris Boyer, Martinez resident.
THE REPORTER: Chris --
MR. BOYER: -- Boyer.
MS. HUNTER: Carolyn Hunter, Tetra Tech.
MR. MEILLIER: Laurent Meillier from Regional Water Quality Control Board.
MS. WILLIAMS: Do we have everybody?
Okay. The next item is to open the meeting up to any comments from the public. Don't be bashful.
We're going to do ours, Ray, at -- under the "RAB Report" --
MR. O'BRIEN: Okay.
MS. WILLIAMS: -- okay? Unless it's earth shattering.
Okay. I don't see that there's any -- any public comment. So then I'll just turn the meeting over to the Navy cochair, Theresa Morely.
MS. MORLEY: Thank you.
Does anyone have any comments on the March 3rd meeting transcript?
Mary Lou?
MS. WILLIAMS: I have a comment, and it's been

an ongoing issue with all of the RAB members, is the fact that we don't have time to review them. You know, getting them ten minutes before the meeting starts makes it difficult. We're always then over a month behind in reading and approving.
And I would really like to see this become something that we'd get at no later than a week before the RAB minutes -- RAB meeting.
Marcus?
MR. O'CONNELL: I don't see how we can approve them if we didn't have a chance to read them.
MS. MORLEY: When did they get mailed out?
MS. HUNTER: They got mailed out two weeks ago.
MS. MORLEY: Two weeks ago.
MS. WILLIAMS: I didn't get any, and that's why I was asking.
MS. MORLEY: Did you ever get yours, Ray, or Gay, anyone?
(No verbal response.)
MS. WILLIAMS: Oh, I -- okay, then, it's -- pardon me. I've got relief mail drivers. No, I do, really.
MR. O'BRIEN: So you have not seen the minutes, Mary Lou?
MS. WILLIAMS: Not the March 3rd minutes, no.

MR. O'BRIEN: Would you like to review them before we approve them?
MS. WILLIAMS: Maybe we can come back to that after the break, and I can get them -- I can get them read if that's all right with everybody here.
MS. MORLEY: Okay. If you don't have them a week before the meeting, if you guys could let me know, I'll make sure that they get sent out.
Okay. With that, Igor, we're -- this is the time that we set aside to discuss the RAB operations and organization that you had proposed at the last meeting. I had E-mailed that to everybody. It's like a three-page thing that starts with background. So, Igor, if you want to go ahead with that discussion.
MR. SKAREDOFF: Okay. Has everybody got a copy of this?
MS. CANEPA: Copies of that back there.
MR. SKAREDOFF: I made several myself.
This is -- copy came up from a discussion that we had about a month and a half ago. Ray and Mary Lou and Evelyn and I --
THE REPORTER: Who?
MR. SKAREDOFF: Evelyn, former RAB member -- were together and talking about how kind of things were going. And out of all that discussion, I attempted to

sort of synthesize what we -- sort of what we saw as a -- as a way to -- to find a way to make the process work a little better. So I took the opportunity to write it down, and there's about three pages here of stuff.

What it really boils down to is two things. One of them is to kind of take a pause, a breath, and maybe not ask the RAB to be commenting -- or not so much commenting, but approving or disapproving of findings or steps along the CERCLA process for a month or two and use that time to do some additional training and bringing up to speed of the various RAB members and use that time for the RAB technical adviser, who's supposed to be coming on board here, I guess, shortly, a chance to review some of the information and brief the RAB members on it and then proceed, you know, after that to -- to start looking at some of these items that we're looking to see whether the RAB supports them or not.

And the other one was to set aside some time in the -- in these proceedings for RAB members to make presentations to -- on particular topics that are of interest.

So it really boils down to those two things, and I wrote them down in, you know, considerable detail. And this isn't intended to be, you know, the word from

Benjamin Franklin to Thomas Jefferson or anything like that. It's just sort of I put it out there it's kind of my best guess as to how we could proceed, and I'd like to just see what everybody else thinks about going about the business in this manner.

MS. MORLEY: Igor, if I could just say one thing, regarding the extension, Gay has given us a couple of RCRA extensions, and the Navy is all done with our response to her, which basically does grant extra time, and it outlines the date that things will be due.

Both the TAG and the tech consultant are now on board. So I think with the extensions that were granted that there should be enough time for them to be able to review documents and get the information that they need. And when we send that out, we'll give a copy to everybody so we can see what the dates are.

MR. SKAREDOFF: Yeah. I guess my sense of that was that we were kind of doing this on a one-at-a-time sort of basis, and I just wanted to see whether there was general agreement that we wanted to proceed by.

MS. MORLEY: Yeah. This addresses most of the sites. So it's a big letter.

And then -- I'm sorry. The other thing I was going to say is: We should be having our RAB support contract awarded probably within the next week or two.

And in that contract, we have set aside money to -- to do RAB training. But we don't have that contract awarded yet. So once we do, we can address training.

MR. SKAREDOFF: One of my hopes in kind of opening this up like this was asking other members what training ought to consist of and what topics ought to be covered and other things what we'd like to see addressed. And so I'm hoping that's one of the things that comes out of this discussion.

MS. MORLEY: Also, if you guys were going to discuss things, I would like if you -- as a RAB you discuss how you want your training, because I've heard of different -- some people would prefer at the RAB meeting. They don't want to come to extra training. And some people would prefer, like, a half a day set aside, kind of do it all at once.

So if we could get some kind of consensus, that would help us direct us.

Gay?

MS. TANASESCU: Could the RAB actually meet separately outside of these sessions in order to deal with these topics so we don't have to --

MS. MORLEY: Sure.

MS. TANASESCU: -- take over this time up with this?

MS. MORLEY: Yeah, of course.

MS. TANASESCU: So could -- Mary Lou, could you set up a couple of dates?

MS. WILLIAMS: Why don't we just -- we can get together for a minute or two at the break and pick a date that everybody can agree on?

MS. TANASESCU: Thanks.

MS. WILLIAMS: Sure.

MS. MORLEY: Marcus?

MR. O'CONNELL: I think that would be a good idea. I think it would be a good idea too if we read our bylaws, because many of these issues are already set up --

THE REPORTER: Can you speak up? I'm having trouble hearing you.

MR. O'CONNELL: I think it would be a good idea too if each of us got a copy or read our copy of the bylaws, because many of the issues that were raised here are also addressed in the bylaws, the bylaws that largely so far just set on the side. This agenda does not follow the bylaws. A lot of the procedures we're following don't follow the bylaws.

MS. MORLEY: Well, then, why don't the --

MR. O'CONNELL: -- look at those things and start running this thing according to the rules that we

have adopted --
MS. MORLEY: Why doesn't the agenda --
MR. O'CONNELL: -- rather than --
MS. MORLEY: -- follow the bylaws?
MR. O'CONNELL: -- rather than ad hoc.
MS. MORLEY: Why doesn't the agenda follow the bylaws?
MR. O'CONNELL: The -- the order of the business on the agenda is outlined in the bylaws. The topics are outlined in the bylaws.
There's no way for us -- For instance, let's start off at the beginning. There's no way on this agenda for us to even approve the agenda and the order of business. But it's in the bylaws. The bylaws call for it.
Instead, the Navy makes this up, apparently has Mary Lou, who signs off on it, but there's no sign-off as a whole supposed to be.
So there is a lot of inconsistencies like that happening, and I urge people coming back to read the bylaws. We adopted them for a reason. They are there for a reason.
MS. MORLEY: I think --
MR. O'CONNELL: This -- this is a really good thing because we're -- we're learning from experience as

we go along the way. Let's try to weave this into the existing framework rather than start from scratch, because a lot of the things that are in here are actually already covered in the bylaws as well.
And I just want to say, to add my two cents on training, I don't think that we have enough time in these meetings to do an adequate job of training. We need two hours approximately every month.
And I -- we have so many sites out here. So many documents are being released. I don't see how possibly we can have training in these two hours and do an adequate job.
Each one of these issues, such as health and environmental risk assessment, each one of those could take up -- well, they take up volumes of material. And for us to be -- even gloss over the surface of it, the short version would probably take half a day on each of those topics.
That's my two cents.
MS. MORLEY: Anybody else?
MR. O'BRIEN: I'd like to make one comment, and it's on page 2; it says schedule twenty minutes for each of the three classes of participants. And the first participant there is the Navy.
I was very disappointed that the Navy could not

provide some input at our last meeting on the litigation area. There is ample Navy repre- -- representation in all of these meetings, and I think the Navy needs to show some good faith and enter into the dialogue here. The EPA has done so very, very adequately. Why can't the Navy?
MS. MORLEY: All right. Were you deeming the presentation that DTSC put on or the Navy litigation area sites?
MR. O'BRIEN: The Navy litigation area sites.
MS. MORLEY: Okay. Well, I think, you know, S- -- you know, Steve just came on -- what, March 7th or something?
MS. WILLIAMS: Tenth.
MS. MORLEY: Tenth?
So let's give him a little time to come up to speed. But I think you'll be pleased that from now on, you'll see more Navy involvement, Navy RPM briefing, and I think you'll be satisfied.
MS. WILLIAMS: Any other comments?
MS. TANASESCU: I have a question.
Is there a way to do any of this training on line?
MS. MORLEY: That was one of the things that we wanted to look at is, you know, maybe getting some kind

of existing certificate program that's already there; or, like Marcus had brought up before, there's probably -- you know, we don't want to reinvent the wheel. There's probably something out there already. So we have to find that.
MS. TANASESCU: Do you think we could find something by next meeting?
MS. MORLEY: I would hope so, yes.
Anybody else?
Okay. With that, let me introduce Jerry Wickham from Tetra Tech will be doing a short presentation on the installation of our groundwater monitoring well.
MR. WICKHAM: Thank you, Theresa.
MS. MORLEY: You're welcome.
MR. WICKHAM: I'm a hydrogeologist with Tetra Tech, and I was asked to come tonight to talk about groundwater monitoring wells, some of the uses and installation sampling, et cetera. So I have a short presentation to do tonight, and then I'll leave time for questions, for questions at the end.
(Setting up slide presentation.)
MR. WICKHAM: So as I said, just be a brief presentation, talk about trips to the groundwater monitoring wells and the uses, its installation

groundwater sampling.
Two portions: I'll go through with some simple diagrams and also some examples of monitoring wells and installation. And also at the end, then we'll have a short video that will go over some of the actual field installation of the monitoring well.
This is a typical example of a monitoring well, the inside of the boring. Again, this is not to scale. This is just to give you an idea of what a typical example would be.
Inside the boring, you would have a -- this would be the actual well that would consist of a screen -- would be slotted piece of pipe. Typically it's constructed of PVC. However, you can use other types of materials. The idea of the slots is to allow water in to keep sediment out.
Above the slotted zone, this would be the zone that you're interested in monitoring. Above the slotted zone would be again a solid casing. This zone you want to keep things out of the well and protect it.
Within the borehole around this particular -- around the well would be a filter pack, again with the idea of letting water in, keeping sediment out. The filter pack would be a graded -- typically a graded sand which would not enter the slots. You don't want it

entering your well. But it would then prevent sediment in the surrounding native material from entering the well.
So it tends to filter that sediment out and not allow it into the well. Again, the theme being you want to keep things out of the well above our zone of interest.
Above that would be a bentonite steel. This is --
MR. ATTENDEE: What?
MR. WICKHAM: Of bentonite steel. This is a clay type of material that expands and prevents material from moving down along the borehole entering the screen zone.
Above that we have sent amendment -- a cement and bentonite mixture. Again, this is under seal to prevent materials from entering the top and -- and getting down into our zone that we're trying to do a monitor.
And then at the top to protect the well, a locked cap. This is usually to prevent anyone from -- other than those interested parties from getting access to it. And then we have a protective cover, again, protecting the integrity of the top, and a steel cover in case we want to have traffic ready for allowing

traffic over it and a concrete apron again protecting integrity of it.
The typical uses that you -- information you get from a monitoring well, as you install it, you're drilling a boring. So therefore, you can get information on the type of soils you would encounter to the depth of the -- basically would be depth to the bottom of the boring. Then you would log those, and we'll see an example of that later.
Other types of material you -- all the information you're going to get is the water levels, static water levels in the wells.
And if you had a number of wells, a minimum of three, you would be able to measure water levels, the static water level of different areas, and then be able to tell -- get an approximation of which direction groundwater's flowing, groundwater moving from areas higher head to lower head, or higher levels to lower levels.
Other types of information you can get out of a well would be: You can aquifer test and determine what the hydraulic characteristics of the soils would be.
This could be through various types of aquifer tests, pumping water out or putting slugs into it and measuring their response; and this would tell you --

from that you would be able to extrapolate how far groundwater would be able to move over a certain period of time.
And lastly, the other type of information and probably the most common reason that you are going to install would be to monitor a particular zone in the aquifer if you had a contaminant zone. This shows a shallow groundwater contamination typical monitoring well configuration for monitoring shallow groundwater contamination.
And so I was going to talk a little bit about sampling techniques. This is just a picture that was a subsurface. This is what it looks like when you see -- don't see too much of the surface.
I was going to talk a little bit about groundwater sampling. Back when I first started groundwater sampling a number of years ago -- I won't say how many. He keeps laughing. He probably knows.
The -- What we tried to do then or standard technique back then was to remove a certain number of volumes of groundwater. The idea was to get as much water as we could out. Typically it was three to five borehole volumes.
We wanted to remove everything around the well and get fresh water formation in. But the way we did so

was fairly aggressive. We would put a pump down here and pump out at reasonable rates. We would draw the water table down, again trying to get three to five casing volumes, which is a fair volume.

In order to be efficiently doing these groundwater monitoring, you want to be pumping at a relatively rapid rate.

What that did, though, was: It caused some disturbance in the aquifer. So the active sampling actually caused us to move groundwater around from different zones, and it also affected the -- the quality of the parameters in the -- in the groundwater as we did that.

Since more recently, in the last few years, we've gone to another technique for groundwater monitoring, and that is to use lower flow. And the idea here is to not cause so much disturbance in the aquifer.

By withdrawing low flow, we are able to not cause as much disturbance in the groundwater sampling, and the flow lines that we're going to get are going to be more predictable rather than causing draining out -- draining a certain portion of our screen zone. We're -- We need to keep that groundwater table up, withdraw a lot less water; but we are going to measure.

The way we're going to determine that we're

actually getting water from outside our screen zone or from outside the immediate borehole is: We're going to be measuring the certain parameters in the water.

And typically what we are going to be measuring is: We're going to be measuring the pH, the temperature, conductivity to dissolve oxygen, turbidity. Those are all parameters that can be easily measured in real time in the field.

When you begin to see those -- and initially when you start withdrawing watering, you're going to see some -- it's going to vary because the water within the borehole and within this particular well is going to be a little different than what you find in the formation.

So you continue pumping at a low flow; don't pull this down too much. The low flow typically is going to be technically slightly less than 1 liter per minute. Typically we pump at a significantly lower rate, typically less than half a liter per minute.

But what you're really measuring is: You're measuring water levels as you're pumping, and you're making sure that you don't draw this down more than about a 10th of a meter.

The way you're going to determine when you can sample is: You're going to measure those parameters; and when they continue to get the same readings within a

certain variance and you continue to get constant readings, then you know that things have stabilized and the water is -- is ready to -- ready to sample at that point.

MR. O'CONNELL: In the old technique, you wouldn't monitor those parameters?

MR. WICKHAM: You would monitor those parameters; but in that case, what your -- your basic -- oh, your basic objective is: You set up when you say I'm going to monitor this well, and I need to remove three to five casing volumes. You would monitor those parameters in -- in the old technique also, but you wouldn't stop until you got three to five casing volumes.

Okay. I'm going to show you some examples of equipment and, then I'll go to the video of the well installation.

This -- One of the themes that -- that you'll note is: There's -- there's many ways to sample groundwater just as there's various materials you can use to construct a well and various ways to drill a hole.

There's all -- There's no one standard method that you use for well installation and sampling and well development, because in some cases, you're trying to get

one objective, and some cases you're trying to get another objective. And the equipment that you use should be tailored to meet that.

For low-flow sampling, this is one of the best groundwater sampling devices. This is a bladder pump that's typically -- again, you want to cause as little disturbance in the groundwater as possible, and bladder pump is -- is one of the better instruments at doing that.

I will show you a setup in the field where we would be sampling with a bladder pump. This actually -- okay. This is -- I'm going to show you the -- This would be a flood control box for the bladder pump that's for using compressed air and going down to the bladder at this point.

Water -- The bladd- -- We had a outlet hose which comes up. The water pours through the bladder periodically, pumps up into a flow cell at the surface. And remember, this is the instrument that we would use. In the old days, you might take water out of a bale or pour it out, and you measure your parameters inside exposed to the atmosphere.

So you have an instrument that you put it in; you measure your pH, your temperature, your conductivity, et cetera.

This is a superior system [indicating] in that the bladder in a closed system, we're not exposing it to the atmosphere. We're pumping it up through a flow cell, again, not exposing it to the atmosphere. This is a closed device which has probes inside it that can measure all of the parameters that we are interested in. So we don't have to expose the sample to the atmosphere to measure those parameters.

So we measure these parameters, and here it goes into a digital readout. And here you see a person in the field monitoring the digital readout of those parameters, records them, again, looking for that stabilization to see when our parameters had stabilized, when we're at a certain -- when we have a certain variation or -- or a low variation in each of those parameters; a little different for ea- -- each parameter.

Once we've got that in -- This -- this also shows some of the other instruments that you're using at the time you're ground -- you're using groundwater sampling. This is a box for the bladder pump. This is where we're getting the air. We get power from the vehicle.

We have a water-level meter. Remember, we want to make sure we don't draw that water table down. So

this is constantly in the hole -- in the well to measure how much drawout we're getting and the PID units, but that's for health and safety.

Yes?

MR. O'CONNELL: Couple of questions. What's the setup time to get this -- from the time that you arrive with the equipment to get this set up so we can take these measurements?

And second question is: How long does it take them to take the measurements?

MR. WICKHAM: Okay. Again, it'll -- it will vary, depend on what type of setup you have for the well and, again, what type of equipment you have.

This particular setup here is one of the nicest setups that you can have, is to have a dedicated sampling equipment; so you have a bladder pump in the well.

And the advantage of that is several. One is setup time. The other big advantage is: You don't have to put anything in or out of the well, because the fact that you put an instrument in or out of the well will cause some disturbance in the groundwater, and that's what you're trying to minimize.

So if you have a dedicated system, it sits in the well. You have a tube up here. You basically drive

up, lay out your equipment, hook it up and at -- and at that point lay out all of this. It just takes five to ten minutes to lay this out, get your equipment set up. This is calibrated already.

And then you're ready -- you may take your PID measurements, record your information on your log sheet, and then you're ready to sample. So you can be ready to sample in ten minutes with this type of a setup.

If you have to do a -- lower your well -- lower your instrument in, then it will take you a little longer. You want to be very careful, again, minimize the disturbance as you're lowering the sampling into the well.

How long would it take you? Again, we're -- this would be -- you would probably have -- purging the well, you're going to be purging it slightly less than about half a liter per minute. You're probably going to be purging it anywhere from five to fifteen minutes, something in that range, before you get stabilization.

MR. O'CONNELL: And that's how long. Then the measurements are almost immediate after that; is that right?

MR. WICKHAM: Yes. Once you begin pumping through the flow cell, you can immediately be getting readings.

MR. O'CONNELL: So from the time somebody pulls up a van, carrying all of this stuff, half an hour they should be out of there, wrapped up and out?

MR. WICKHAM: With this type of setup, yes --

MR. O'CONNELL: Yeah.

MR. WICKHAM: -- that's right.

Okay. So there it is. Basically, this is -- say you -- your idea is to get representative groundwater. And you would place the wells at the locations that would be ideal for whatever it is you're trying to monitor at that point. Groundwater sampling would --

MR. O'BRIEN: Excuse me. Is there any message in that diagram? The -- the well does not go to the actual contaminant spot.

MR. WICKHAM: Yeah. I just put that so that -- there's really no message there. I just --

MR. O'BRIEN: You don't -- you don't keep them separate?

MR. WICKHAM: No. You may have the objective you want to measure. Typically what you want to do is: You want to measure -- get various points around it so you define it.

You may define it by a different method in installing a monitoring well, but your monitoring well

system you're going to have a monitoring well that is downgrading at the edge of your plume so that you can monitor its arrival so that you can make sure it hasn't gotten there already.

So that's kind of a -- I didn't put a full plume on there. That's kind of the -- the guard well that you want to see, well, has the plume got in here yet or not? You want to have one downgrading to see when it did get there.

Okay. Once the parameters are stabilized, then we are ready to sample various containers that would be used in a laboratory, depending on the analyte that you're sampling. You would use various containers.

Preservation technique, always have your cooler for groundwater sampling. Most sampling -- Some of them -- samples you preserve with acid; some you don't. Again, it depends very much on the analyte. The volume that's needed depended on the analyte. Place in a cooler, and it's maintained at about 40 degrees cents -- Celsius until it gets to the -- to the laboratory.

All right. This is just in filling techniques. Once you do the -- Once you do your actual sampling, you'll probably cut your flow rate down even more, again, minimize disturbance.

So you may be purging at half a liter per

minute. You may cut it down to when you want to do this type of delicate operation.

Making sure we have no air bubbles anywhere in the sample bottle, and then at that point it's ready.

As I say, there's other techniques they can use. I did show you a setup with a bladder pump. This is just a illustrated different type of pump that we're using.

This is very shallow groundwater. This is actually Treasure Island. So the groundwater here is only a few feet down. This particular pump is not a bladder pump. This is a peristaltic pump, operates on a slightly different principle. It's a little oper- -- different operation. But again, it depends on what the conditions are and what is -- what it is that your objectives are for the particular site.

MR. MENESINI: Would you repeat the name of that pump, please?

MR. WICKHAM: The peristaltic.

MR. MENESINI: Peristaltic.

MR. WICKHAM: Yeah. P-e-r-i-s-t-a-l-t-i-c.

All right. Final phase. Once your groundwater samples are collected, we monitored all these parameters in the field using the flow cell.

And most of the time we would ship them off

site to a certified -- certified laboratory, and they'd analyze it using U.S. EPA methods.

This particular -- We -- Also at times we have some analyzed that we want to measure in the field. And these are not necessarily chemicals that are contaminants, but they are chemicals that we want to measure so let us know something about what is -- what is happening with the ground -- with other groundwater parameters besides our chemicals are concerned.

So in some cases, we will use a field laboratory to measure those. And that's what we are doing in this case. Some things -- Some chemicals that are -- tend to be -- we need to do the analysis fairly quickly because the parameters may change during the transport to the laboratory.

Okay. Let me sh- -- I was going to go now to the video. This is a video that Steve Tyahla has put together.

MR. TYAHLA: You want me to explain it? You can talk.

I guess the -- I used to work kind of for the Hunters Point team in the construction office. And one of my hobbies is, like, videography. And actually, this is a test video. That's to show them -- the Hunters Point people team, like, how I do it.

I shot -- it's a very typical installation of a groundwater monitoring well. And so a lot of things that Jerry just went over with you, like, when the different pieces go in, you could see actually them going in. Well, it's hollow-stem auger rig and, you know, that you see them taking split spoon samples of soils. They go down and with -- how they break that up and look at it in the field, you know.

And Jerry could talk to -- I mean, I don't even play all of this on TV, so I can't explain it.

But it's -- sometimes it's now you've seen the cartoon of it. You kind of see realistically what they do. And I don't know. It's two and a half minutes. It's --

You might want to make a full screen, view full screen. I would bring it. I didn't have my digital.

Just have a quarter version on that.

MR. WICKHAM: Okay.

MR. O'BRIEN: You're not starring?

(Laughter.)

MR. TYAHLA: I don't want to be in the front end of it.

MS. MORLEY: We have nominated Steve for the next year's Oscar of documentary short story.

MR. WICKHAM: So this is the -- this drill rig

here would be typical of the kind you -- most monitoring wells are put in by this method, not -- again, not all. There are different methods you can use. You can use hydraulic methods as well.

This is a hollow-stem auger rig. It has a -- it has a lead bit on the bottom, which -- and then it pushes soil up around the flights, and they are brought to the surface.

This is sampling. This is soil sampling here. They put some rods in. That's a split-spoon sample that's being pulled out. There's a hammer that drives those rods in, and it pushes that split-spoon sampler down through the soil. You see why they call it a split spoon. It has a shoe on the bottom which you unscrew, and then you pull off this part, and then you get to the inner liner.

The inner liner -- liner consists of four brass tubes, in this case 6 inches long each. Those can be taken apart, and individually that particular brass liner you -- caps on the end of it. Seal up the caps, and that can be sent to the laboratory. The laboratory will take subsamples out of that particular batch.

The other thing you do with a -- this subsoil is to -- you want to scribe it, log it what type of soils you have. You could be noting using unified soil

classification system to scribe the grain size, color, other inclusions and other observations in recording that onto the boring log.

This is an example of the well s- -- the slotted well screen that I mentioned. This is PVC. Again, you want very thin slots. You want to keep that water in, keep sediment out. This is -- and they keep it wrapped in plastic.

The hollow-stem auger, you can place the well screen and casing inside the auger, which protects it from the soil as you put it down to the target depth. It's lowered down, screened; and then they begin to construct the actual filter pack and the other material around it.

This is sand, well-gra- -- graded sand of a certain size. You want it so it doesn't enter the slots in the well screen, but it's -- also it is -- will allow groundwater in, keep soil from the native soil out of the well.

That's the bentonite. That forms that seal that we saw on top of the filter pack, the clay material that expands. And above that they are going to be putting concrete -- the cement concrete-bentonite mixture in. This par- -- Here they're just removing some water from the well.

So here's the casing as it stands up, locking cap placed on; and there's the cement mixture, cement-bentonite mixture, that goes around the casing, again, to keep anything from going down the well that might affect our results.

So now you want to protect the upper surface of it. So you put -- this box lays on top of that, and then you pour concrete around that to form -- to hold the cap in place and protect the proportion.

Very good, Steve.

(Applause.)

MR. TYAHLA: Thank you.

MR. WICKHAM: Okay. Any questions? That's the end of my material I have to present.

MR. TYAHLA: One -- one thing I want to elaborate on, I thought there was two things real key. One of them is: You want to expand on the fact that the low-flow sampling technique is pretty much something that's been developed for a while and something common that EPA uses, and our work plans pretty much adhere to that.

And it's another one of the key reasons why work plans getting approved through the regulators is key, because how you do things in the field is -- you know, the day's only as good as what you get. And so

you want to talk to that.

And also the fact that the way you design those things is to get what is representative as you can as to what's actually right there in the ground, what's removed, that kind of stuff.

MR. WICKHAM: Mm-hmm.

MR. TYAHLA: I mean . . .

MR. WICKHAM: Yeah. The -- When you do -- Sampling from the low-flow techniques now are generally being -- are being used as a standard groundwater sampling technique. Again, our sampling plans at the -- at Concord will have that as the groundwater sampling method.

Again, exactly how you do that and what equipment you use, there are -- there is some variations in equipment that you can use. But Steve mentioned that -- that is our goal, is to get representative groundwater samples, representative of ambient conditions, conditions -- undisturbed conditions of the groundwater.

MR. SKAREDOFF: This is not really on this particular topic, but it might be related.

A lot of things that we have been reading I heard about or read about potentiometric readings to determine the flow of groundwater. Can you --

MR. WICKHAM: Sure.
MR. SKAREDOFF: -- tell us about that briefly? Is it --?
MR. WICKHAM: I didn't -- I didn't go into too much about hydraulics. The -- I mentioned that you -- one of the -- one of the types of information you get is the water level or this potentiometric surface. It's another -- "Potentiometric surface" is a fancy name for the elevation of the water table if you're dealing with the water table aquifer.
And the monitoring well, you drill it down; you -- you either know what steps you're going to encounter water, based on the existing information, or you're going to be monitoring it as you go down to the borehole, you know, the hollow-stem auger. So hollow stem, you can go down, and you can find where you're encountering water.
The information you're going to get from a series of monitoring wells, you're going to be having various water levels at different points around the site.
You're going to take that information as to what is the water level on each well, plot that information up; and from there you're going to be able to see, well, this is a higher -- higher groundwater

elevation, which would go to a prior -- higher head or pressure, higher head over here.
You have a minimum of 3 points. Then you begin to triangulate that, and you can begin to see what the -- what the surface of the water table looks like. Or if you're looking at a deeper zone, you'd be looking at a pressure head which doesn't necessarily meet the water table, but it's a deeper pressure in a deeper zone in the aquifer.
But let's say if you're just looking at that water table; you're looking at the configuration, the upper surface of that water table, from that you can see, well, I have highs over here; I have lows over here. You can immediately see where groundwater comes into your system and where groundwater is exiting your system, and from that you could determine what the approximate flow directions are in proportion to your site.
MR. SKAREDOFF: How does the word "potentiometric" deal with this again?
MR. WICKHAM: It's one of those technical terms. Potentiometric surface means it's --
MR. SKAREDOFF: Then what's the --?
MR. WICKHAM: -- the potential of a -- the probe.

MR. SKAREDOFF: It's nothing to do with the electrical charge, then?
MR. TYAHLA: God no, no.
MR. SKAREDOFF: Well, you know, potentiometry sounds electrical to me. I was wondering how that was all covered.
MR. WICKHAM: Any other questions?
Yes.
MS. WILLIAMS: Jerry, why do you have to cool your samples in the cooler as the -- what you're interested in in analyzing? Does that degrade with either heat . . . ?
MR. WICKHAM: Yes.
MS. WILLIAMS: How does that affect the analysis?
MR. WICKHAM: It's a preservation technique. So U.S. EPA methods for analyses will specify a preservation technique after you collect the sample, because as you -- it's -- most of the time it's exactly what you're mentioning is that there's going to be degradation of the sample, a change in the chemistry between the time you collect the sample and the time it's analyzed.
So it -- for example, biologic activity, you want to minimize biologic activity in the sample.

Cooling a sample is -- keeping it cool and on ice is to help you do that.
MS. WILLIAMS: Thank you.
MR. STRAUSS: Jerry, maybe this is a topic for -- or topics for another talk, but it -- it occurs to me that -- that nobody mentioned, is there a standard method of how many samples you take in a given area? And I knew that that would be a worthwhile -- I don't know if the -- if the RAB has -- has gotten that -- that information.
The other thing is the different types of sampling, more innovative, that I'm sure that you're using down here. I -- I assume that you're using, like, Hydropunch and diffusion samplers. I don't know if you're using that.
MR. WICKHAM: Yeah. Well, you're right. There are -- there -- As I mentioned, there -- this is -- there's no really standard method. What I -- what I put up here would be the most typical monitoring well installation.
There are other ways to collect groundwater samples you mentioned. Hydropunch is one. So there are various techniques that you can use without installing a permanent well to collect the groundwater sample.
But again, I think it goes back to what is your

objective of the site. If you're doing initial investigation, you really don't know what it is you're going to find. You may want to do some groundwater samples to explore without the expensive installing a permanent monitoring well.

So you might need a coring first, getting information and then making some plans to do some permanent -- some more -- some additional installing monitoring wells which would give you a longer-term picture of things and provide you additional information that you're not going to get just from groundwater sampling.

For example, if you wanted to monitor over time, the groundwater monitoring might be the best choice. But you have many choices in your investigation, and we have a lot of techniques that we can use. And you're right, it is -- there are many variations that you can select.

Now, as far as the number of samples or the number of analysis that you would do, that really is -- you're right, that is another topic, because it really gets into new data quality objective, what is it that you -- what is -- what is your overall objectives for that site and what is the problem that you're studying.

Okay. Thank you.

(Applause.)

MS. MORLEY: Okay. We're a little bit ahead of schedule. So we'll go ahead and take our break now if that's okay with everyone.

(Recess 7:49 p.m. to 8:04 p.m.)

MS. WILLIAMS: Shall we come back in session, please?

The next item of business -- while you're writing -- is the committee reports from --

You can go from here.

MS. MORLEY: Okay. Steve, do you want to go ahead and do the Navy RPM --?

MR. TYAHLA: Yeah, okay, since there's no community reports.

MS. MORLEY: Did I say I'm on?

MR. TYAHLA: Yeah, "I'm on." She's taking all this down.

I'll stand up. I guess everybody probably remembers who I am, the new RPM, the new one, the one that came in, like, five weeks ago. It just kind of seems like three months, four or five months ago.

But what I thought I'd do is go through and, you know, kind of, like, jot down notes for what's been going on the last month as far as, like, meetings and things like that, give a summation of that.

And the two agenda items on there I'll just, like, will pause and go over those in a little more detail.

So last RAB meeting is the 3rd of March. So that's when I -- in my introduction, I think I told everybody I met the regulatory team back then, and I was pleased with who I was going to be working with. And after doing that for five weeks with a lot of interaction with them --

MR. ATTENDEE: Changed your mind?

MR. TYAHLA: No. I actually -- I think it's probably -- it's -- I'm probably -- I'm honest in saying that I think it's probably better than I had hoped. I mean, Phillip, Jim, and Laurent -- well, Laurent sometimes, but they are all -- they are all great to work with, and they're really -- they really bend over backwards to try to help me, you know, break in to what's going on at the base and been very cooperative.

And we've had a lot of -- Every meeting we had has been really productive and solved the issues we needed to resolve.

Yes. So the 10th of March is my first day officially. The 13th of March, for instance, we had a meeting with the regulators about the off-base groundwater issues. And that was really spurred on by

the last RAB meeting when Mr. Byrne -- is he here?

ATTENDEE: Mm-hmm.

MR. TYAHLA: Okay. Probably right here. My memory's bad.

So we got the petition with -- I think it was nine people on it, and it had to do with the desire to see the Navy do something off base really with Site 22 when we try to close it out.

And we responded by writing -- in writing on the 24th of March. I'm assuming you got that letter, and I think we have copies of it here.

And in general, I'd like to ask you, in -- generally, general they kind of, like, answer the mail for you, and you understood it?

MR. BYRNE: Yes.

MR. TYAHLA: So I'm going to go over what I put in that letter. And it took -- it took a while to get out, 'cause mainly, you know, I met on the 13th of March with the regulators, 'cause when I first met them -- you know that when it was before that -- it was clear to me that, you know, they knew this was an issue just generally off-base, you know, groundwater concerns.

So they did know -- like I said, they -- they were very cooperative, and we gave them good ideas for how to respond on that area, what we thought we needed

to do.
So two of the things that are in that letter -- you know, one thing, two sites -- is: The Navy will go ahead, and we will be sampling for perchlorate, testing for perchlorate, at Site 17 and 22.
Site 17, the burn area, it's more of an obvious case to suspect something might be there because of what was done there historically.
Twenty-two, probably debatable but we figure 'cause of its location, and Phillip from EPA pointed out that the community would really see a lot of benefit of us getting a sample from there because, you know, where it's closer to the perimeter of the base. So you want to --
MR. RAMSEY: Correct. It's --
MR. TYAHLA: Oh.
MR. RAMSEY: It's Site 13.
MR. TYAHLA: Thirteen.
MR. RAMSEY: You're saying "17," Steve.
MR. TYAHLA: I'm sorry.
MR. RAMSEY: It's just --
MR. TYAHLA: I can't read my --
MR. RAMSEY: It's --
MR. TYAHLA: -- print. Thank you.
See? They're always keeping me out of trouble.

So, you know, there --
MR. RAMSEY: From the railroad.
MR. TYAHLA: Right. I think -- I think I probably got confused because 13 and 17 are on the same ride, and I just confused the two. So 13 and 22 would be the two we will do that.
And I told you, the Navy -- we have a letter that basically proposed what -- for how we would do that in draft. So right now we're working getting the sampling and analysis plan.
When Jerry was talking about how you go and sample a well and the techniques you use, well, that's why it's so important to have a work plan that tells you not only how you're physically going to sample that well, but also what analytical methods you may use for different analyses.
And we didn't have a current plan that had the details for perchlorate analysis. So we need to get that information, put it together, will go in a letter to EPA and the other regulators which -- basically saying: Here's our plan, and do you concur with it? And that's what we'll do. And then we'll contract and get out there in the field to do some sampling.
So that letter is not out yet. We have the contractor now working on the sampling analysis plan,

and we will get that -- get that together and put it in a letter and get it out to EPA as soon as we can and copies to DTSC and the Water Board. So that's one of the things we'll mention in the letter.
But I thought overreaching, which is probably more important, is -- in talking with the regulators on the 13th is: We thought kind of important to start talking about generally what we know about some of the groundwater at sites, like, 22 and 13 and anything that's kind of like bordering our edges and explain how we examine those sites for groundwater, you know, what, you know --
Basically, it's: We start in at a site, trying to assess potential sources of contamination, and kind of go out and follow it if you find it.
So we thought it would be important in the future to discuss with the RAB more detail about how we actually do that at a site. So tonight's presentation by Jerry is kind of like you might call a prerequisite for, like, well, how do you examine the groundwater in general? That's what he tried to do.
Some of you, like, well, how would you really test groundwater? How were you sampling?
So the next RAB meeting what we plan to do is come up with a map that shows -- you talked about

potentiometric surfaces. Basically picture, like, an underwater contour map of where groundwater would be. If you look outside and you see contours of the land, picture in the way of a map how groundwater might look underground to get an idea of implied flow direction.
So we're working probably with maps to show more detail at Sites 22 to 13 to get a feel for that, what we know now about the sites, okay. So that's an objective for the next RAB meeting, show that in a map and explain it a little better.
I guess -- and then like I said in the letter, we are also going to develop a contact list of available -- you know, that talks about the local sources for private owners that, if you had, you know, some concerns about groundwater qualities, generally what agencies are out there, put them in someplace so if you had a question about, well, the groundwater quality, who can you talk to.
And also, somebody approached for groundwater and --
Oh. We are also investigating the so- -- the sources off base that you listed that -- by E-mail that, you know, you said, "Well, they are big users of off-base groundwater."
So we'll check, and we're trying to -- right

now we're gathering some information about what they know about their water. Good thing -- Good information to have just, you know, so we know what's happening adjacent to us. So we're working on that.

Yes?

MR. O'CONNELL: Harry, are you happy with the answer you got?

MR. BYRNE: Right now I am, yes.

MR. O'CONNELL: Are you going to be looking at just perch., or are you going to be looking at other things as well? Site 22 you found arsenic.

MR. TYAHLA: Well, yeah, good question, because right now there is a work plan on the way. We are going to be doing more work at 22. But we figured if we're going to go out and do this for perchlorate, while we're out there, let's grab a well instead of waiting.

So that's why we're doing that. We're just going to take probably -- well, the idea is: We take which what we pick, but it's going to be something that's most indicative of what's closer.

You know, that's still going to get looked at. We aren't blowing it off. It's just -- it's just that when we're out there in the field, you know, knock it out, get that over --

MR. O'CONNELL: Are you going to get in touch

with the people with wells?

MR. TYAHLA: No. No, we're not -- not until we -- not unless we would see -- A lot of -- One of the things I put in the letter, not a lot of detail, but what would tell us to look at a well off site is going to be what we see something different and we decide that, God, we better check out where it is.

But until we see that, we have no reason to tell us to do that. Otherwise, I mean, we'd be chasing everything. It would be crazy.

MR. O'CONNELL: You can go to wells that are adjacent to the base and --

MR. TYAHLA: Well --

MR. O'CONNELL: -- take a sample and send it down to Sequoia Analytical for a few hundred dollars and get an answer without making a big deal out of it.

MR. TYAHLA: Well, that's -- first up in our minds is: We want to check what's right at our border. So that's what we're going to do. I mean, that's -- technically that's typically how we check the sites, like, in the locale.

Other meeting we had, 20th of March, we met with the regulators. That was our informal dispute resolution meeting that covered both Site 13, 17 ROD; and Site 13 basically came out to, like, yes, we're

going sample for perchlorate, and then we'll pursue the ROD after that.

But we got into more discussion on the litigation area. We had a five-year review plan -- five-year periodic review assessment report. It was out October -- I think it was --

MS. ATTENDEE: 23rd.

MR. TYAHLA: -- October.

Okay. So that report came out. And there ware some recommendations we had in there that EPA, well, didn't really totally agree with that we didn't want to do certain kind of monitoring. But the meeting went really well.

So we came up with a couple reactions about developing monitoring plan to continue. But to develop that monitoring plan, we're going to have further discussions with the regulators about what do- -- data quality objectives we need to reach and that kind of thing.

So it's going to be a process we go through to figure out what monitoring we need to do. That was one of the major issues.

The other one had to do with basically something we kind of promised that we were going to do already, and that is the supplementary feasibility

studies that three of the -- well, three sites within two of these RASS areas that weren't found to be protective in the five-year review. So those are going to get more -- examined more closely.

And the Navy has even proposed to try -- we don't totally, totally have it signed off yet, but we are pursuing getting these three units -- actually named new IR sites -- which kind of helps us track and to focus on and make sure we get funding for them so we can move forward with them, including the feasibility studies.

So that meeting went really well. During that meeting, we started talking more about the site management plan, which I'll talk about a little later.

Monday, the 24th, well, that's the date I sent -- or we sent a letter out to Mr. Byrne; and also, we had our -- our remedial project managers meeting.

And we talked -- generally, it's follow-up from previous issues, litigation area. There was not much to talk about. We just met about that. We were working on that, talked a little about the Site 13 perchlorates, the site -- yeah, 13 for perchlorates. I have it right here. I was wrong before.

So -- and that was just a matter of us getting the work plan together. So that wasn't done yet, but we

are working on that.
And that was pretty much it.
I think, oh, we did talk about, I guess, AOC 1 that -- which is also Site 31, that we had a supplemental soils sampling summary report that went out; and we are going to do some groundwater sampling there as follow-up to that additional sampling, AOC 1.
And that's probably going to happen, like, mi- -- middle of April. I think we are targeted for, like, the 16th to get out there and do -- sample those wells. We were held up because of really crappy weather. It was, like, soup to try to get out there and perform.
Let's see. Next meeting, 26th of March. We have -- This was something -- This is why I really like the regulatory team I'm dealing with, because Phillip offered to have, like, an informal three-hour -- basically a three-hour informal meeting with the RPMs at EPA's offices just to help me get the sense of their priorities and, like, fill me in on just some of the history, some of the -- a couple of the key sites we want to talk about.
It was -- you know, we didn't take any minutes. Just kind of like casual just to get the feel for me. It was really for my benefit, but -- and Jim and Laurent

were involved, and it really -- it really helped me a lot. I mean, that was excellent.
And during that meeting, I came up, you know, since the site management plan basically is scheduled for this whole program. It's been a thing that's kind of like in flux; and in my mind, honestly, it never really looked like a good management tool.
So I proposed to them that what I want to do is put this into a project management software, you know, that -- What it does is give you the benefit when you put in the scheduled changes, it shows you the effect that one change will have. So I want to start using that as a tool.
And I kind of put myself on the hook to transform the current site management plan using that software so we can, like, step by step develop it to where it's useful for all of us. And I gave them, like, a little schedule for -- internally to target myself, step by step, to get us there.
And I think that's going to be a great tool, and that's going to be eventually my bible. It's going to help us all make decisions together on what to do first and what sites are priorities.
30th of March I was in traffic school. I got -- It was a beautiful day too. That was no fun.

Don't speed. Okay.
And the last meeting we had was the 2nd of April. We had a RPM meeting just specifically to review a Response to Comments on the draft sampling analysis plan for Site 30, Taylor Boulevard Bridge up here. Now, that's a site where we put out a draft sampling analysis plan. We got comments back from the regulators.
So we sent out a Draft Response to Comments that we could sit down with and go over and fine-tune it so when we put the draft final on it, the thing's right. It's what they got to expect, as you know.
And this is the kind of meeting that I will be strongly pushing for with the regulators just because I hate doing rework. I hate just, like, constantly reviewing reports. I want to keep things on track. Easiest way to do that is when I get comments, resolve them face to face or be very explicit that we know they are solved.
So just as a for-instance, at this meeting, we had a map out of where we propose to put borings and wells, and we sat down and we all had input, and we ended up redrawing the map.
So -- I mean, that's the kind of, you know, cooperation I think is key for all of us to just nail down things simple, simply like that. So before we go

out there and do work and spin our wheels or spend money, you know, I want to be sure we're, you know, getting the products we want.
So that's kind of like my first month as lead RPM, I guess, in a nutshell.
So any -- any key questions people want to know before it gets turned over to Phillip next?
Do you have something here?
MR. STRAUSS: Yeah. I just was wondering if you're -- if you're just testing for arsenic and perchlorate. Are you testing for -- other analytes?
MR. TYAHLA: Okay. You brought that up, and you get -- okay. Well, right -- Site 22 -- and Joanna, you can help me out.
But Site 22 is just like, well, we're definitely going to be doing more work, because during the -- where we had done, we had a surprise, and we found, like, some elevated levels of arsenic in some of the surface soil that was kind of like, in our minds, unrelated to what the site history was. So we're, like, scratching our heads over that. So we know we have more work to do there.
Now, when we go out and do perchlorate sampling, groundwater sampling, in Site 13, because -- and this was really a suggestion by Phillip, and I

totally agree with him that because of where this is located, it makes sense that, hey, you're right there; grab a well, get a sample of that while you are out there doing this.

So that's why we're doing that. It's kind of like you almost look at that, like, unrelated to Site 22 issues, but you just grab it 'cause of where it is. So we have something later closer to perchlorate.

MR. STRAUSS: If you're -- if you're looking at perchlorate, are you looking at RDX and nitrate and all of that, the other --?

MR. TYAHLA: For 22 we are just looking at the perchlorate right now. And we are doing explosives -- explosive analysis also at Site 13, because I think the prior data we had some, but none detected, but I think Phillip recommended do it again just because -- you know, to get a more current data.

And again, 22, activities at 22 -- historical -- the history of 22 doesn't give us a reason to suspect there's something there, based on the use of the site. So we're doing it because of where the site is and, you know, just to confirm that nothing else is going on up there.

But thir- -- you know, 7 -- 13 as a burn area, yeah, we -- we added in in the explosive analysis. I

forget that method number. But -- So we're doing both there.

Okay. So that's it.

MR. O'CONNELL: Are you developing a map of the groundwater at Site 13?

MR. TYAHLA: What we're doing is -- it really helps answer Harry's question -- is: We figured, well, you know what, it's --

MR. O'CONNELL: I'm talking about Site 13.

MR. TYAHLA: Yeah. That'll be -- We're going to do probably --

Do you remember the site? Was it 13, 22 --?

MS. CANEPA: I think it was 13, 22, and SWMU Sites 5, 7, and 18.

MR. TYAHLA: Yeah. So I think around the borders we'll do, like, blowouts of those to show, like, you know, the underwater ground contours based on information we have. We aren't doing additional investigation.

MR. O'CONNELL: Are you doing that at 13?

MR. TYAHLA: Yeah, 13 and 22 and the SWMU sites area.

MR. O'CONNELL: Now, 13 has already been the subject of a Record of Decision.

MR. TYAHLA: No, that's not final. That --

that record --

MR. O'CONNELL: Record of Decision -- Draft Record of Decision.

MR. TYAHLA: Well, it's a draft.

MR. O'CONNELL: And you have no groundwater -- no analysis of groundwater flow?

MR. TYAHLA: No. No, I'm not saying that. I'm saying we have data, but what we want to do for the benefit of RAB is kind of show what we know where on the site.

MR. O'CONNELL: I thought you said ground -- okay. I misunderstood.

MR. TYAHLA: Yeah. The sample we are doing is for perchlorate sampling.

MR. O'CONNELL: I thought it was for developing the data.

MR. TYAHLA: No. Well, we're pulling it together just to put on the map.

MR. O'CONNELL: You're not doing any additional or looking --

MR. TYAHLA: No, except for perchlorate. So we're sampling for perchlorate, because that's one of the things -- that was really what helped us put in the dispute with the ROD. So that's why we were going to knock that out.

MR. O'CONNELL: Well, I want to put my two cents on that early, put it in your report.

MR. TYAHLA: On the -- on the ROD?

MR. O'CONNELL: On -- on the groundwater flows in that area. They haven't been looked at. I've looked at Site 13, not adequately.

The reason is, Mt. Diablo Creek used to flow right through there --

MR. TYAHLA: Mm-hmm.

MR. O'CONNELL: -- right -- right adjacent to that site and are huge groundwater flows right by there. And they are completely ignored.

You've also a fault. A fault line runs right just a little this side of that. It needs to be looked -- looked at for its effect on groundwater flows. And that's never been looked at.

So there's -- so there's some -- some issues there that for some reason, that's completely ignored when Site 13 is done. I don't know how that can be.

MR. TYAHLA: Well, I don't know anything about -- I personally don't know much of what the hydrogeology right here now. So I'm even learning as I go.

But before we --

MR. O'CONNELL: I'm trying to submit some

information and some comments so that you can take those back when this is all done, you know, at the end of this meeting for somebody doing this groundwater study in putting it together so that it reflects the facts that I've just relayed to you instead of ignoring them as done previously.

MR. TYAHLA: Well, let me point out, like, two things. Number one is: I don't think we are planning on doing a new hydrogeo investigation here. What I'm talking about presenting is what we know.

The second thing is -- maybe three things. Second -- second thing is: The ROD was basically put in dispute because we don't have the core analysis there. I don't think there was anything actually holding up that ROD.

So what this -- what is -- what the Navy plans for this site is: We're going to do perchlorate sampling and see how that comes out; and if it's favorable --

MR. O'CONNELL: Just a second. I don't think you're listening.

MR. TYAHLA: I hear you.

MR. O'CONNELL: I said I would like to see that your groundwater -- that your information about groundwater is at least consistent with the fact that

it wasn't exactly what you were covering here. But the main thing I got out of looking at Site 22 was: I'm surprised that you mentioned arsenic.

MR. TYAHLA: Yeah.

MR. SKAREDOFF: And I guess based upon what I read, it sounds like it's probably from poisoning ground squirrels, very good likelihood.

MR. TYAHLA: Don't know. I mean, right now without a record of anything, it's kind of speculation. There's some likely sources.

MR. SKAREDOFF: Well, the places where it was it looked like there's berms where the ground squirrels might have been and so on and so forth.

I guess what I -- I would like to just ask to be put on the -- on the menu to -- to be looked at is to do kind of a -- an analysis of the usages or -- around the -- the Weapons Station to find out where it's likely that it may have been -- may have been a lot of --

MR. TYAHLA: Right.

MR. SKAREDOFF: -- going on and then maybe develop a plan to look at those to see just how widespread the arsenic issue might be.

MR. TYAHLA: Well, actually -- actually, when we're talking about it, it's the kind of stuff we are already thinking about, like, how we, like, gosh, okay,

there's a fault line there has a lot to do with groundwater flow.

And also that there's a huge groundwater flow left over from the original channel at Mt. Diablo Creek. When I say "huge," I mean, there's an underground river there, and that hasn't been acknowledged or -- or talked about in any of the previous studies.

So if you're going to do a groundwater -- give us groundwater data, please make sure that it's consistent with those physical -- geophysical facts of the site. I don't need a ration -- I don't need you to rationalize anything. Just please take that back and make sure that that happens.

MR. TYAHLA: Well, let me just leave with that whatever existing data you have is what we'll present.

Is there anything else?

Oh, someone in the back there? Igor?

MR. SKAREDOFF: Go ahead. Okay.

MR. TYAHLA: Okay. Thanks a lot. Or do you have something?

MR. SKAREDOFF: I got a question, yeah. This is on a Site 22 question.

MR. TYAHLA: Okay. I may need help with it, but that's all right.

MR. SKAREDOFF: Yeah. Well, I -- I know that

well, we know if we check it out. And it's, like, well, what it could be from; and, you know, but that's -- I think that's why Joanna takes notes. So I'm sure we'd develop what our work plan ought to be for investigating it, you know.

MR. SKAREDOFF: 'Cause I don't think it's a Site 22 issue.

MR. TYAHLA: We're thinking the exact same thing. I mean, we found it almost, like, practically by accident. I mean, it was almost background --

MS. CANEPA: Yeah.

MR. TYAHLA: So it's like one of those things that pops up, but -- Now, you bring up some very good points, I mean, you know, why was it there is the question.

Do you want to --?

MS. CANEPA: I just wanted to clarify that the supplemental RI didn't conclude that it was necessarily the rodent control source. It concluded that it's likely a man-made source, and -- and the distribution looked like it was obligation of something so that it's not --

MR. SKAREDOFF: I think I'm amazed at --

MS. CANEPA: -- conclusive that it --

MR. SKAREDOFF: -- amazed at --

MS. CANEPA: -- what the source is.
MR. SKAREDOFF: -- the junk from that. I'm thinking that's probably why it was the case.
MR. TYAHLA: Yeah. I know I'm probably not a vermin control expert, by any means.
Yes, ma'am.
MS. WILLIAMS: Steve, if this area is near the football field at Mt. Diablo High, they had a terrible squirrel problem because it was tearing up the turf and --
MR. TYAHLA: They were -- maybe came from the other direction?
MS. WILLIAMS: No. They -- they started doing pest -- pest control. And then the community found out they were using whatever you use to control, and they were poisoning the ground squirrels; and then, you know, the community went up in arms. I guess they had to figure out something else. But it was definitely destroying the -- all of the turf at the foot -- football field.
MR. TYAHLA: Okay. That's the first I heard of that. Thanks.
MS. TANASESCU: I just wanted to add that a couple of years back there were articles in the newspaper about the ground squirrel problem at the Naval

Weapons Station because they were boring through all of the underground concrete structures, causing a lot of major damage to the entire site.
So I don't know -- again, you brought up the issue that it may be throughout the site in different areas?
MR. TYAHLA: Yeah.
MS. TANASESCU: And I think you're probably going to find that.
MR. O'CONNELL: Subject.
MR. TYAHLA: Yes, sir.
MR. BOYER: I've heard a fair amount about the ground squirrel issue, and there was --
THE REPORTER: I'm sorry. I don't know who's speaking.
MR. BOYER: I'm sorry. Chris Boyer again.
THE REPORTER: Okay.
MR. BOYER: As I recall, they -- they limited that to a -- with a trap-and-bait issue. It wasn't a spray.
MR. TYAHLA: Who's "they"?
MR. BOYER: "They" was, I believe, the Water District I actually believe that did the work for them, for the Navy.
MR. TYAHLA: Oh, like, you say on base?

MR. BOYER: They did, yeah. They -- that they were concerned about the canal.
MR. TYAHLA: We'll have to check into this.
MR. BOYER: The Navy I don't think ever did anything on the buildings. It was all around the canal, okay.
MR. TYAHLA: Well, what the -- you know, it's part of our research for what we -- how we got to assess this, but that's -- thanks for the info. That's good.
Okay. I think I'm -- I need water. Thanks.
MS. MORLEY: Phillip?
MR. RAMSEY: Yeah. What I -- I'll just take a little bit of time. I noticed one thing, Steve, if you don't mind, when we did -- we did talk about, because you covered actually our meetings very well for the month.
MR. TYAHLA: Okay. Did I miss --?
MR. RAMSEY: Perhaps the RAB members will want to hear about what we're looking at, then. I'm trying to look at what I could fill in to add to what you just presented perhaps for my little few minutes. I could just elaborate on that.
And let me just add also, we do plan to have a meeting. I mean, Steve did a good job going through our -- our various meetings we've had with the Navy.

And I concur, we've had a lot of very productive meetings.
We have gotten 13, 17 disputes resolved along with the litigation area. Navy's going to be providing some more information to kind of supplement the informal discussions and our general understanding that we are basically there. We have reached agreement on those two documents.
And we also -- you know, this meeting just recently on the Taylor Boulevard Bridge Response to Comments, that also went well. So we are pleased with the Navy's preliminary responses.
On the 16th we are going to be meeting with the Navy to talk about the schedules. We are trying to get the SMP back in shape. There have been a number of RAB requests for extensions, and we've been trying to work with the Navy to get all these little pieces cleaned up and come back with a working SMP and trying to get this thing back in shape, for our June amendment will be coming up here before too long.
There are several documents that EPA is looking at right now. We will be finishing up our comments on the Site 22 supplemental RI, remedial investigation, report. EPA's comments are due -- on my calendar they are around the 13th of this month. So we will be

finishing up those comments. I think we have talked quite a bit about this.

Maybe the Navy -- I'm not sure you -- probably something good for our presentation in the near future. What we do plan to do is scope out this additional work at Site 22.

There will likely be some additional soil samples taken in addition to the groundwater work that's been proposed, and I've already -- EPA has already made other specific groundwater requirements, and right now I don't need to go into them at this point. But the RAB will be getting our comments on Site 22 here in another week or so.

We're also finishing up our review of -- for the Solid Waste Management Units, the SWMU sites, which are the maintenance buildings in the core of the facility.

We are now looking at the Navy's response to agency comments on the draft RI report.

And also in general we have these -- reviewing again the Navy's Response to Comments. We have about the middle of April to submit those, and I don't -- a couple areas we will probably want to have discussions.

In particular, I noticed both EPA, Department of Toxics and the Water Board have asked for soil gas --

asked the Navy to consider doing soil gas.

What the Navy indicated is: They acknowledged they would do additional investigations, but it wasn't specified if soil gas would be done. So we're probably just asking, you know, we would like to have a soil gas work done.

So that's one clarifying comment coming back from EPA review of the Response to Comments for you, Steve.

In general, things are -- I think we're in general agreement on the scope, the strategy for site -- or for the SWMUs site where the Navy will go back, do some additional characterization work, then finish up the RI report.

Another document we have received in -- this is the end of March we started receiving pieces of the AOC 1, various removal reports.

First we have got from the Navy is a -- it's the summary -- removal action summary report, and then about three weeks later we received a supplemental soils component. It was, in fact, to have been a joint removal action summary and the supplemental sampling result summary.

Those have ended up getting split up. And in fact, at the supplemental sampling, we had -- the soils

data has been split up from the groundwater. That will be coming along shortly. So everyone is basically just -- we're all getting started on this AOC 1 removal about the same time.

And lastly, we have received a litigation area -- it's the supplemental RI data gap sampling, the additional RI work that's being done for the litigation area, have received the sampling plan end of March. And so we're on track here for a two-month review to get that done.

So those are the -- kind of the key documents right now that the RAB – everyone has.

In addition, the Navy's going to make some changes in the litigation area five-year review. But we kind of want to remind the RAB members that people need to comment on that. This is one document that we would suggest. There's nothing that prevents the RAB from starting.

Even though there -- the Navy will be making some what we believe relatively minor changes to that five-year assessment report, it's -- basically, it's this big two-volume maximum, you know, large volume set of documents; and they are good enough for the public to review those. You could take regulatory correspondence and kind of use that together to figure out where the

difference was.

And w- -- and we should be seeing, then, some change-outs, some minor modification on the litigation area five-year review and then likewise the Site 1 ROD. The Navy is in the process of fixing that ROD, and I believe we're going to be seeing a draft version around May -- first week of May.

MR. SKAREDOFF: Site 1 is the . . . ?

MR. TYAHLA: Maybe later.

MR. RAMSEY: Maybe later.

This is the landfill, and what we said so there will be a revised ROD submitted, and then the public has 60 days to review this revised draft final Record of Decision.

MR. SKAREDOFF: And just for my clarification, I'm still trying to get this vocabulary in my head.

The Record of Decision is the step in the process over there [indicating] which decides what actually is going to be done to take care of the issues on that site?

MR. RAMSEY: Right.

MR. SKAREDOFF: Is that right?

MR. RAMSEY: Right. The remedy design document.

MR. SKAREDOFF: Okay. So we're going to be

getting that, and we will have 30 days to comment on that?
MR. PINASCO: Sixty.
MR. SKAREDOFF: Sixty days?
MR. RAMSEY: Sixty was what --
MR. SKAREDOFF: Okay.
MR. RAMSEY: -- time.
MR. SKAREDOFF: And then after that process has run its course, then the RAB can start doing something, somebody start doing something about that site.
MR. RAMSEY: Then they go on to plans and the planning documents and start the fieldwork.
MR. SKAREDOFF: So we're close in getting something going on?
MR. PINASCO: Yes.
MR. RAMSEY: Yep.
And I think that's all for me, Theresa.
MS. MORLEY: Thanks, Phillip.
Jim, do you have anything?
MR. PINASCO: Not much to add. Phillip's done a very good job.
One thing we did, we have produced a draft final electronic comments on the five-year review that I shipped out to the Navy, those regulators, and I shipped a copy to Mary Lou for the RAB. Anyone else needs a

copy . . .
MS. MORLEY: That's it. Thanks, Jim.
Laurent?
MR. MEILLIER: Let's see. Couple things to add.
Of course, I've attended a perchlorate workshop at Region 9 headquarters at EPA that was very informative related to perchlorate and its impact on the environment.
We also had -- also had a UST meeting at Tetra Tech where we discussed UST site at Port Chicago as well as basewide priority in terms of review and environmental impacts of USTs at the -- at the base.
And we also discussed UST database, and -- and the linkage was between the database that we have at Regional Board and GeoTracker, which is a statewide database software.
And for just recently actually for water today their comments on the Site 22 IR. And we are now about to finish the UST A 16 comments on the UST site that is located in the tidal area.
And that's about it.
MS. MORLEY: Thank you, Laurent.
MR. MEILLIER: You're welcome.
MS. MORLEY: Mary Lou?

MS. WILLIAMS: Okay. The first item here under the RAB report is: All the community RAB members received a copy of an application for appointment to the RAB by -- I had it right here just a second ago. Oh, thank you -- by Chris -- Christopher Boyer, but he goes by "Chris."
Would you stand up, Chris, so we can see?
There we go.
Okay. You've all read it. Does anybody have any questions they want to ask Chris? We're under the discussion part of all of this. I don't think we need a motion. Do we?
MR. RAB MEMBER: I don't think so.
MS. TANASESCU: I have a question.
MS. WILLIAMS: Okay.
MS. TANASESCU: I'll be honest, I haven't really looked it through. I've sort of just glanced at it. I was just wondering if you're affiliated with any city or government agency or --
MR. BOYER: I have employment with the County, but that's not why I'm here.
MR. SKAREDOFF: I guess I would just like to offer Chris the opportunity to just have a -- have a couple minutes to tell us something, whatever it might be.

MR. BOYER: I go by "Christopher," because people when they hear "Chris," they expect a woman to show up. So it -- it would save me from embarrassing dates.
I'm a 23-year resident of Contra Costa County, displaced here from Pennsylvania by the Marine Corps a long time ago. I'm originally down in Southern California and then back up here to Contra Costa County. I have homes in Clayton, Martinez, and Pleasant Hill.
Stewardship in the community is high on my list of things to do. I've been on the Master Plan Commission for the Pleasant Hill Rec & Park District, an interim member of the Board of Directors for a number of years. I teach for them.
I'm a deputy sheriff. That's my occupation. And I'm responsible for search and rescue within the Contra Costa County.
I work with the state Office of Emergency Services dispatching all the search-and-rescue dogs within the state of California.
I'm a member of FEMA Task Force 3 out of Oakland.
I have nothing better to do with my life.
(Laughter.)
MR. BOYER: What else would you like to know?

MR. O'CONNELL: Sufficient.
MR. BOYER: Okay.
MS. RAB MEMBER: Where do you find time for it all?
MR. BOYER: I'm single. Just me and the two dogs.
MS. WILLIAMS: Any other questions?
Well, I'm going to go ahead and then ask for the RAB membership for a motion to vote Chris on.
MR. MENESINI: I'll move.
MS. WILLIAMS: Second?
MR. O'CONNELL: I'll second it.
MS. WILLIAMS: Okay. It's been moved and seconded that we accept the application of Chris Boyer for membership as a community member of the RAB.
All in favor?
THE BOARD: Aye.
MS. WILLIAMS: Any opposition?
Welcome, Chris. We'll have your -- we'll have your little name thing next time.
MR. BOYER: Great. Thank you very much.
MS. WILLIAMS: And you will be getting mail.
MR. O'CONNELL: Lots of it. Lots of it.
MS. WILLIAMS: Yes.
MR. O'CONNELL: In the future, if we have items

that we are going to take action on, they need to be explicitly listed on the agenda.
MS. WILLIAMS: There wasn't time on this one, Marcus. We wanted to get it opened up.
MR. O'CONNELL: I don't care. If it is not on the agenda, then --
And I -- I welcome our new member.
But this is a procedural thing. If you're going to take an action on an item, it has to be listed on the agenda, or you should be putting it off till the next -- the next meeting.
MS. MORLEY: Well, I read on the bylaws while all of the groundwater presentation, and I saw that there needs to be a space; and I think that was on there before that said if there's going to be changes to the agenda, then you make them at that time in the -- in the beginning of the meeting so we can put that on there. It was actually Evelyn had taken the approval off, so -- but we can put it back on. That's not a problem.
MR. O'CONNELL: Yeah. Again, if we're going to -- if there are any actions that are subject to our taking action, they need to be listed on the agenda.
MS. WILLIAMS: I'm well aware of that now.
MR. O'CONNELL: I don't know if that's in Robert's Rules or where that is.

But it seems to be a standard operating procedure for any -- any body that action items are listed on the agenda, explicitly on the agenda; and if -- because if someone -- a member of the public had any interest in that item, somehow they need to be able to learn about it. This is supposedly the document that they are going to learn about it how they are going to be notified. So it is important to be followed.
MS. WILLIAMS: Are we governed by the Ralph M. Brown Act --
MR. RAB MEMBER: No.
MS. WILLIAMS: -- under --
MR. RAB MEMBER: No.
MS. WILLIAMS: -- state law?
We are not. Then we are not in violation, and this will not happen again.
MR. O'CONNELL: This is beyond the Ralph -- This is in the Robert's Rules of Order, I think, if I'm not mistaken. I think it's probably -- if it's not on the agenda; if it's not in the bylaws, it should be.
And I think it's a matter of common sense that if you are going to have an item that you're going to make a motion on and you're going to take an action on, this needs to be on the agenda. This is an explicit thing.

MR. SKAREDOFF: Marcus, I think we're all in -- in agreement with you on that. It's just that we are still kind of regrouping, and this was a inadvertent thing to get left off. I just heard promises being made that we won't do this again. So --
MR. O'CONNELL: Okay. If I hear that, then that's fine. And I'm -- I'm not objecting to having it occur, but if we go off the agenda --
MR. SKAREDOFF: Well, we -- we get your point. We'll work on it.
MS. WILLIAMS: Ray, earlier in the meeting you raised your hand with an item. Did you hopefully remember what it was?
MR. O'BRIEN: Yeah. There was an E-mail from Theresa saying that we would not have a presentation here at the RAB on the integration of the integrated cultural resources management plan with the environmental cleanup. And I believe that instead you have provided a point paper to us in place of that.
MS. MORLEY: By that person. He had a conflict tonight; but he said if the point paper didn't address your concerns, he could make them later. He couldn't come tonight.
MR. O'BRIEN: Okay. His presence here would be very helpful --

MS. MORLEY: Okay.
MR. O'BRIEN: -- because the basic question is still not answered: How is an integrated cultural resources management plan integrated with the cleanup at the Weapons Station? That's the question.
MS. MORLEY: Okay. I will put that on the agenda.
MR. O'BRIEN: Thank you.
MS. MORLEY: You're welcome.
MS. WILLIAMS: Is there any other comments or whatevers from the RAB members?
MR. MENESINI: I -- I just will probably break every law that we ever made here --
MS. WILLIAMS: That's okay.
MR. MENESINI: -- but I'm going to -- I'm going to announce a -- an event that Igor Skaredoff is involved in, and he's the presenter; and we are going to be talking about the water management in Alhambra Creek on Monday, April 21, 2003, at 12 o'clock at the John Muir National Historic Site.
So any of you who would like to hear about the new research on watersheds, Igor's going to talk about that. And -- and as all of us know, what we're talking about here in great respect has to do with the analysis of watersheds.

So hopefully, some of you will be interested and visit the John Muir site with us on that date, April 21st, at 12 o'clock, and hear his presentation.
MS. WILLIAMS: Thank you, Mario.
Anything else?
MR. SKAREDOFF: I have --
MS. WILLIAMS: Igor.
MR. SKAREDOFF: I have a item, Mary Lou. Last time I received a written response from the Navy on my previous questions having to do with the SWMUs, and I just want to sort of provide sort of a generalized reaction to that.
And that is that it looks to me like a lot of the issues that I had were probably due to a -- being able to read just the last -- last -- having read the last edition, I guess, of other reports and not having gone back and read all the previous stuff.
It looked like a lot of the questions I had had been addressed in other reports that had been published before. And so I just wanted to sort of state for the record that I thought it was a pretty good response and that I feel generally more comfortable with the whole process now that I've had these kind of things pointed out to me.
And it looked to me from the response that

there was going to be some reediting being done to try to make it easier to catch on to some of these things, like, maybe refer back to some of these other previously covered items.
For instance, I had one question about a particular place. It looked like it was obviously -- an obvious place to be that if you have a well drilled; and, well, why wasn't there one?
And in fact, there had been one. They drilled through a bunch of concrete and had done -- done all that work. But I couldn't find it in a particular report I was reading.
So I think maybe it's been a pretty good experience for all of us and learn from each other on how to present these things. And for those of us who are reading these, at least for me -- I shouldn't speak for everybody. For me it's been -- raised my level of comfort. And so I want to thank you for a prompt response.
MS. WILLIAMS: Okay. Thank you.
I- -- Are there anythi- --?
Gay.
MS. TANASESCU: I wanted to get a response from Theresa concerning the agenda for the RPM meetings.
MS. MORLEY: Yeah. I talked to Steve about

that at dinner; and because they don't come on time with the meeting minutes before the RAB, we'll probably send those just to you by E-mail.
MS. TANASESCU: Okay. And what's the process in terms of when we want to assign one of the technical advisers to attend the meeting?
MS. MORLEY: Well, that's why I said I'd have to get back to you because I hadn't had a chance to talk to Phillip and Jim and Laurent and everybody before -- when I got your E-mail this morning by the time I flew up here. So I wanted to talk to them first about how that would be handled, and then I'll get back to you.
MS. TANASESCU: And will I find out before the next meeting?
MS. MORLEY: Yes, yes.
MS. WILLIAMS: Anything else?
Well, then, the next item is --
Is it your turn or my turn? We'll put joint turn.
The agenda for the --
MS. TANASESCU: I -- I'm sorry. I just wanted to clarify, we're talking about the next RPM meeting, not the next RAB meeting, correct?
MS. MORLEY: Right.
MS. TANASESCU: Thank you.

MS. WILLIAMS: Okay. Now we're ready for agenda items for the next meeting in May.
MS. MORLEY: Before we -- anyone offers a suggestion, right now as it stands we -- we'll probably have one technical presentation; Phillip brought up Site 22, the supplemental RI, and also the presentation from the natural -- the cultural resources archaeologist.
So keep in mind if you do bring up another one, that we're already getting kind of impacted. That's three -- that's three pre- -- two presentations and the committee reports. So --
MR. TYAHLA: The Site 22 supplemental?
MS. MORLEY: Phillip brought up maybe the --
Is that what you said, Phillip?
MR. RAMSEY: Well, that was a suggestion, yes.
MR. TYAHLA: Well, I'm thinking before we jump on that one, I'm thinking, one thing we did kind of like Mr. Byrne's letter is by a more detailed review of, like, Site -- the SWMU Site 13 and Site 22 what we know about existing data. That's something that we were going to work with, you know, work on; and we started on it, but to show, like, what we know about the existing data on those sites, probably put that on the agenda.
The Site 22 I don't think we have a draft work

plan done yet for Site 22.
MS. CANEPA: It's not there.
MR. TYAHLA: It's not --
MR. RAMSEY: It may be better to come back when we have scoped out --
MR. TYAHLA: Well, I --
MR. RAMSEY: -- additional work.
MR. TYAHLA: It's not going to be a major --
MR. RAMSEY: That could be a good --
MR. TYAHLA: Exactly.
MS. MORLEY: So June?
MR. TYAHLA: So I don't want to pick a month yet. I would just wait, decide --
MS. MORLEY: So instead of that, then --
MR. TYAHLA: Yeah.
MS. MORLEY: -- you're go- -- you're going to do the groundwater?
MR. TYAHLA: Right, the site specific groundwater review for, like, Sites 13, 22, and SWMU area for sure.
MS. MORLEY: Okay. Gay?
MR. TYAHLA: Thanks.
MS. TANASESCU: If there's something that comes up between now and the next meeting that we'd like to see added to the agenda, is there a deadline when we

have to contact you by?
MS. MORLEY: Normally it's, like, two weeks I'm -- I'm sending it to Mary Lou to get her input and then -- because we have to have it to Mary Lou and get her approval, then to the regulators, get their approval, and into the paper by the Friday before the Monday the week before the RAB.
MS. TANASESCU: So we have two weeks from today, then?
MS. MORLEY: Yeah. That's my short answer, I guess.
MR. MENESINI: Can you repeat that?
MS. MORLEY: So, yeah, two weeks if you could get that, that would be great.
Okay. So does anyone -- with -- keeping in mind that we already have, then, the site specific groundwater, the committee reports announce -- announcements and the cultural resources, does anybody have anything that they want to see on the next agenda?
Marcus?
MR. O'CONNELL: Well, I'm wondering if we shouldn't hear something about the litigation, some fairly thick -- a number of fairly new reports. In the last several meetings, we hadn't had any discussion, any technical presentations. I think we did that for a long

time, and I'd like to see us maybe get back to that rather than --
MR. RAMSEY: Well, actually, I did -- that was -- I mean, I probably talked too long evidently on the litigation area, EPA's, where was EPA on the five-year review. So you can --
MR. SKAREDOFF: That was at last month's meeting, a big topic.
MR. O'CONNELL: Okay. I wasn't here.
MS. MORLEY: You know, how about if we have Steve making it kind of an expanded discussion under RPM briefing, so maybe not a technical presentation, but he can talk about where we are and what's going on?
MR. RAB MEMBER: Yeah. I think --
MS. MORLEY: Would that be --?
MR. O'CONNELL: The second thing -- and I -- maybe it was talked about at the last meeting, which I missed -- is: Has the information repository been brought up to date?
MS. MORLEY: Mm-hmm.
MR. O'CONNELL: And is the administrative record available and up to date, the administrative record available?
MS. MORLEY: The spreadsheet? Yes. That was handed out at the last meeting and if --

MR. O'CONNELL: Is a copy available digitally?
MS. HUNTER: Yes.
MR. O'CONNELL: Okay. I --
MS. MORLEY: Yeah. You want --
Now, did you send a package?
MS. HUNTER: I sent you a package. There was a CD, and all of the handouts from the last meeting --
MR. O'CONNELL: Okay.
MS. MORLEY: Right.
MS. HUNTER: -- is in there.
MR. O'CONNELL: So the information repository is complete?
MS. MORLEY: Yes. And that's the Excel spreadsheet too.
MR. O'CONNELL: Okay.
MS. TANASESCU: Can I get the last couple of mailings for the last couple of meetings sent?
MS. MORLEY: Yeah, mm-hmm.
MS. WILLIAMS: Okay.
MR. STRAUSS: Can I ask another -- can I ask another question?
Can I -- can I get the comments from EPA and DTSC and the -- the Regional Board sent to me?
MR. RAMSEY: Yeah. We --
MS. MORLEY: Do you want to be copied too on

there?
MR. STRAUSS: Yeah, I want to be --
MR. RAMSEY: You know, we could just start copying. We don't have a --
MR. STRAUSS: -- and all the other comments they did provide to the Navy.
MS. TANASESCU: And that would be for both technical advisers, Patrick as well?
MR. COOPER: The only -- the only issue there, providing the technical advisers with all the copies of all documents, is: It scopes the work designed around certain work that they are going to do.
And so, for instance, if there's a line being drawn, Peter's going to do half and Patrick's going to do half, then you're not going to want to pay them to read each other's -- the documents for the other side.
MS. TANASESCU: No, exactly. And the way it's been divided is that Peter's predominantly responsible for the end portion, and the -- Patrick's responsible for the tidal area. And if there's anything in the documents that overlaps in any way, it would be nice if that information were shared.
MR. COOPER: The point is, if they just got everything, then they'd be wading through stuff that --
MS. TANASESCU: Yeah.

MR. COOPER: I'll try to --
MS. TANASESCU: So it should be pertinent to their areas.
MR. COOPER: So you guys can figure out how to -- the Navy can figure out to draw the line working with that.
MR. STRAUSS: Well -- well, David, exc- -- excuse me. I -- I was asking for the comments because the comments I can -- you know, I -- you know, the comments -- you can send me comments, or you can send me E-mail on the comments. I mean, if you have electronic version --
MR. COOPER: Right.
MR. STRAUSS: -- then it's easy to get information sorted out. I can delete the things that are not relevant to me.
MR. COOPER: Just as long as you're not charging. That's the thing.
MR. ATTENDEE: Well, Peter knows the scope of work.
MR. STRAUSS: Exactly. There's a very defined scope of work for the TAPP.
MS. WILLIAMS: Okay. Before I ask for a motion to adjourn, I'd like to interject a personal thought here; and Tom Pinard is retiring again for I don't know

how many times, and I would like to thank him for all of his input and time this past year and wish him well; and if he gets bored, he knows where we are.
Thank you, Tom.
MS. MORLEY: Did you want to say . . . ?
MS. WILLIAMS: The next meeting -- we're changing again, now that we're located here very nicely -- at the Clyde Community Center, a la air conditioning, at -- I don't know what the date is. May -- I don't have a calendar.
MR. STRAUSS: Is it a Monday?
MS. WILLIAMS: It's a Monday.
MR. STRAUSS: May 5th.
MS. WILLIAMS: May -- Monday, May 5th, at 7 p.m. at the Clyde Community Center; and I presume everybody knows how to get there. If not --
Yes?
MS. TANASESCU: I just had a question. Since it looks like our group is slowly growing, is there room there?
MS. MORLEY: You know, that's a good question, Gay. Not only that, but, gosh, it was so hot last summer that I think if we go there in May but maybe rethink that and maybe move to Bay Point sooner or maybe do six mo- -- I don't know.

We don't really have that much representation from Clyde. It really is Bay Point and Concord. So we might want to rethink that next time of maybe going six months at Bay Point and six months here. See what you guys think, because it is -- it's awful tiny, and it is hot in the summer.

MS. WILLIAMS: It's cold with the furnace too.

MR. SKAREDOFF: Is this room not -- not available anymore?

MS. MORLEY: Pardon?

MR. SKAREDOFF: Is this room no longer available?

MS. MORLEY: Oh, yes, it is. We just -- We were rotating every four months, right.

MR. SKAREDOFF: Just about the time I figure out how to get here.

MS. WILLIAMS: Okay, then.

MS. MORLEY: Just for next month, and that is Cinco de Mayo. So if anyone wants to bring margaritas for the group . . .

(Laughter.)

MS. WILLIAMS: Okay. Then may I have a motion to adjourn, please?

MR. MENESINI: So moved.

MS. WILLIAMS: Second?

MS. TANASESCU: I second.

MS. WILLIAMS: Okay. All in favor?

THE BOARD: Aye.

MS. WILLIAMS: Motion's passed. We are out of here on time.

(Off record at 8:57 p.m., 4/7/03.)

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CERTIFICATE OF REPORTER

I, CHRISTINE M. NICCOLI, Certified Shorthand Reporter of the State of California, do hereby certify that the foregoing meeting was reported by me stenographically to the best of my ability at the time and place aforementioned.

IN WITNESS WHEREOF I have hereunto set my hand this 23rd day of April 2003.

CHRISTINE M. NICCOLI, C.S.R. NO. 4569